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Group Art Unit: 2661  
Examiner: Kenneth N. Vanderpye

8. (Amended) The method of Claim 6 wherein broadcasting further includes:

at each node that receives the broadcast failure message, identifying nodes connected thereto which belong to the same areas as the failed link and sending the failure message only to such identified nodes.

12. Please cancel claim 12.

13. Please cancel claim 13.

14. Please cancel claim 14.

15. (Amended) The method of Claim 28 wherein sending at the detecting line card includes multicasting the failure message and periodically resending the failure message until an acknowledgment message is received from each of the other line cards.

16. (Amended) The method of Claim 28 wherein the message bus carries high and low priority messages and wherein sending at the detecting line card includes sending the failure message at high priority.

17. Please cancel claim 17.

Please add the following claims:

26. (New) A method of failure notification in a communications network, the method comprising:

providing a communication network having at least two overlapping areas of nodes interconnected by communications links;

upon a failure event involving one of the communications links, broadcasting a failure message identifying the failed link, the broadcast being confined within the areas which includes the failed link; and

wherein the broadcasting step includes at one or more of the nodes, sending to a connected node a LAPD protocol unnumbered information frame containing the failure message and resending the failure message in another unnumbered information frame

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after a time interval unless an unnumbered acknowledgement frame containing the failure message is received from the connected node.

27. (New) A method of failure notification in a communications network, the method comprising:

providing a communication network having at least two overlapping areas of nodes interconnected by communications links;

upon a failure event involving one of the communications links, broadcasting a failure message identifying the failed link, the broadcast being confined within the areas which includes the failed link; and

wherein the broadcasting step includes at one or more of the nodes, sending to a connected node a LAPD protocol unnumbered information frame containing the failure message and periodically resending the failure message until an unnumbered acknowledgment frame containing the failure message is received from the connected node.

28. (New) A method of failure notification in a communications network, the method comprising:

providing a communication network having at least two overlapping areas of nodes interconnected by communications links;

upon a failure event involving one of the communications links, broadcasting a failure message identifying the failed link, the broadcast being confined within the areas which includes the failed link;

wherein each node includes plural line cards, each line card terminating a link to another node; and

wherein the broadcasting step includes detecting the link failure at one of the line cards connected to the failed link; sending a failure message to the other line cards on a message bus within the node of the detecting line card; at each of the other line cards, sending the failure message to the associated connected node.

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29. (New) A method of failure notification in a communications network, the method comprising:

providing a communication network having at least two overlapping areas of nodes interconnected by communications links;

upon a failure event involving one of the communications links, broadcasting a failure message identifying the failed link, the broadcast being confined within the areas which includes the failed link;

establishing a working path which traverses one or more areas of nodes, the working path comprising a series of links;

for each area through which the working path traverses, precalculating an associated protection path comprising a different series of links; and

if the working path includes the failed link, switching the working path to the associated protection path for one of the areas that includes the failed link.

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